Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

What is claimed is:

1. (currently amended) A process for producing inositol from plant materials comprising the steps of:

(a) treating an aqueous slurry of plant material with a phytase enzyme to partially hydrolyze at least one of phytate, phytic acid and phytin to inositol phosphates, under conditions which do not promote full hydrolysis to inositol.

(b) separating said slurry into a water soluble fraction and a water-insoluble fraction:

(c) separating said water soluble fraction into a first ionic fraction which contains anionic components comprising inositol phosphates and a first other fraction which contains the neutral components;

(d) hydrolysing [[t]] the inositol phosphates in said first ionic fraction; and

(e) separating the hydrolyzed first ionic fraction into a second ionic fraction and a second neutral fraction which contains inositol.

2. (original) The process of claim 1 wherein said phytase enzyme does not include acid phosphatase.

3. (original) The process of claim 1 wherein said step of treating the aqueous slurry is carried out at a pH between about 3.0 and about 7.0.

4. (original) The process of claim 3 wherein said phytase enzyme includes acid phosphatase.

5. (original) The process of claim 1 wherein said step of separating the slurry into a water-soluble fraction and an insoluble fraction is carried out by centrifugation.

6. (original) The process of claim 1 wherein said step of separating the slurry into a water-soluble fraction and an insoluble fraction is carried out by filtration.

7. (currently amended) The process of ~~any of claims 1-6~~ claim 1, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises treatment of said first ionic fraction with phytase.

8. (currently amended) The process of ~~any of claims 1-7~~ claim 1, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises treatment of said first ionic fraction with acid phosphatase.

9. (original) The process of claim 8, wherein said hydrolysis is carried out at a pH of less than 4.

10. (currently amended) The process of ~~any of claims 1-6~~ claim 1, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises subjecting of said first ionic fraction in the absence of added phytase to conditions of temperature, pressure and pH which promote hydrolysis.

11. (currently amended) A process as claimed in ~~any of claims 1-10~~ claim 1, comprising the step of separating purified inositol from said second neutral fraction.

12. (new) The process of claim 3, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises treatment of said first ionic fraction with phytase.

13. (new) The process of claim 3, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises treatment of said first ionic fraction with acid phosphatase.

14. (new) The process of claim 13, wherein said hydrolysis is carried out at a pH of less than 4.

15. (new) The process of claim 3, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises subjecting of said first ionic fraction in the absence of added phytase to conditions of temperature, pressure and pH which promote hydrolysis.

16. (new) A process as claimed in claim 3, comprising the step of separating purified inositol from said second neutral fraction.

17. (new) The process of claim 4, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises treatment of said first ionic fraction with acid phosphatase, and wherein said hydrolysis is carried out at a pH of less than 4.

18. (new) The process of claim 4, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises subjecting of said first ionic fraction in the absence of added phytase to conditions of temperature, pressure and pH which promote hydrolysis.

19. (new) A process as claimed in claim 4, comprising the step of separating purified inositol from said second neutral fraction.

20. (new) A process as claimed in claim 7, comprising the step of separating purified inositol from said second neutral fraction.